

**“But I live in poverty” ...
bridging the gap of Type 2
diabetes care**



**Anita H. King, DNP, FNP, MA,
CDE, FAADE**




**Professor, College of Nursing
University of South Alabama
aking@southalabama.edu**

No conflict of interest in presentation




Objectives

- **Identify populations in deep poverty**
 - **Describe effects of poverty on diabetes**
 - **Discuss the expanded role of future health care professionals**
 - **Describe at least 4 initiatives to bridge the gap between poverty and Type 2 diabetes**
- 

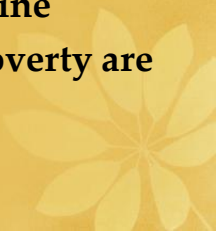
Poverty is not an accident.
Like slavery and apartheid,
it is man-made and
can be removed by
the actions of
human beings.

- Nelson Mandela



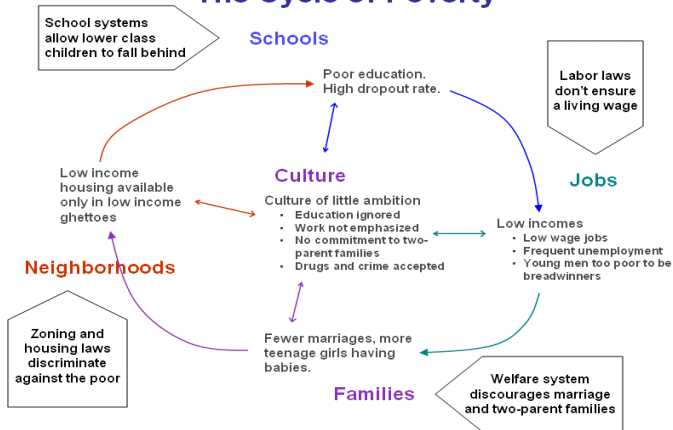



Poverty Statistics

- Rates increased 2000-2012 to 48.8 million-at or below \$23,492 for a family of four;
 - 44% in “deep poverty”: income 50% or more below the poverty line
 - Largest increases of deep poverty are in South and Midwest
- 

Culture of poverty

The Cycle of Poverty






Broke versus Poor


"mindset" {*noun*}

a set of beliefs or a way of thinking that determines one's behavior, outlook and mental attitude.





Change the Mindset!

- **Opportunity is nowhere
to....**
 - **Opportunity is now here.**
- 

Etiology of health issues

- **Street address is predictor of health**
- **Lack of:**
 - **Insurance**
 - **Money & Food**
 - **Transportation**
 - **Support**



Food Insecurity & Food Deserts

- Populations eat junk food due to lack of quality foods
- Junk foods alter brain chemistry



Twin epidemics result: Obesity and Type 2 diabetes



Type 2 Diabetes: What Is It?

Features of type 2 diabetes

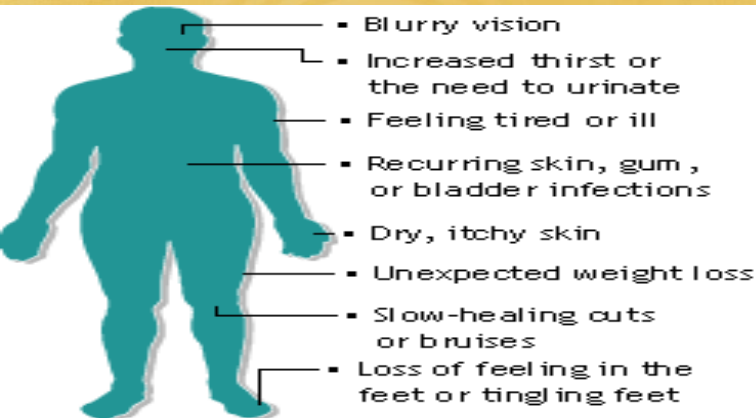
- Insulin resistance
- Abdominal obesity
- Sedentary lifestyle
- Hypertension
- Raised triglyceride levels
- Low HDL levels

TYPE 2

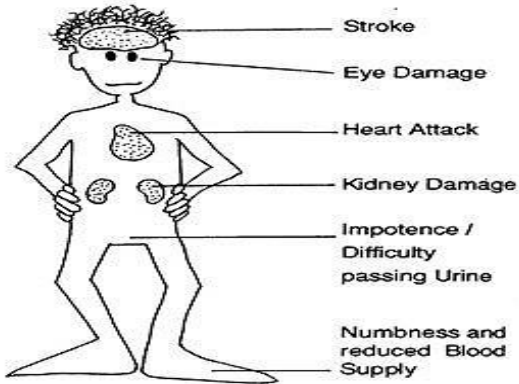
DIABETES



Symptoms of Type 2 Diabetes




Complications of diabetes and obesity






Four factors within our control

- **Tobacco use**
 - **Food choices and Portion size**
 - **Inactivity**
 - **Stress**
-
- **Roizen, Dr. Michael. RealAge, Inc.,
<http://www.myclevelandclinic.org>**
- 


Nola Pender: Health Promotion Model



Individual Characteristics and Experiences	Behavior-Specific Cognitions and Affect	Behavioral Outcomes
<ul style="list-style-type: none">• Prior related behavior• Personal factors: biological, psychological, sociocultural	<ul style="list-style-type: none">• Perceived benefits of actions• Perceived barriers to actions• Perceived self-efficacy• Activity-related affect• Interpersonal influences: (family, peers, providers); norms, support, models• Situational influences: options, demand characteristics, aesthetics	<ul style="list-style-type: none">• Immediate competing demands (low control) and preferences (high control)• Commitment to a plan of action• Health promoting behavior




Individualized care goals

- **Systems approach**
 - **Patient-centered; collaborative**
 - **Goal-directed; Problem-based**
 - **Culturally sensitive**
 - **Cost-effective**
- 




Diabetes Goals

- **Fasting blood glucose: less than 126**
 - **2 hour post-prandial blood glucose: less than 160**
 - **HgbA1C: less than 6**
 - **B/P 130/80**
 - **LDL: less than 100**
 - **HDL: over 45**
- 




- **Diet is cornerstone of treatment**
- **Regular meal schedule**
- **Avoid concentrated sweets**
- **6-8 glasses water daily**





Teaching strategies

- **Simple materials-Teach in phases**
 - **Use interpreter if foreign client**
 - **“Learn and do”**
 - **Individual and group classes**
 - **Call 211 for area agencies to help**
 - **Food banks**
 - **Follow-up**
- 

Teach “eating well on a limited income”



Pumpkin Chocolate Chip Muffins
Joyofbaking.com



Dietary Teaching Tips



Download from
Dreamstime.com

1457803

Tajana Babalovic | Dreamstime.com

For about \$20, you could buy...

X



- 8 pieces KFC chicken meal
- 8 biscuits
- 2 soft
Total: \$19.61

OR

✓



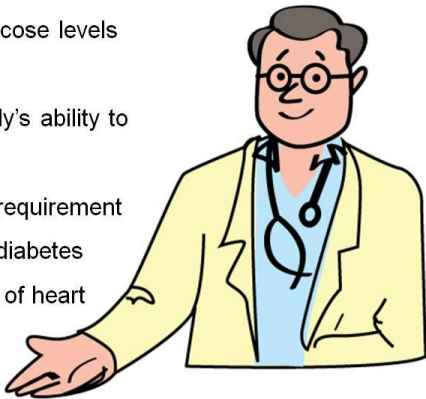
- 2 pounds chicken breasts (\$1.96)
- 10 pounds ground beef (\$2.97)
- 8 ears corn (\$2)
- 1 pound peaches (98 cents)
- 1 gallon skim milk (\$2)
- 1 pound 96% lean ground beef (\$2.98)


- 32-ounce tub of 99% fat-free Yoplait yogurt (\$2.27)
- 18-ounce canister of corn (\$1.18)
- 2 pounds frozen sweet peas (\$1.98)
- 1 pound of dried kidney beans (\$1.22)
Total: \$19.54

SPAREPEOPLE


How does Exercise help?


- ✓Lowers blood glucose levels quickly
- ✓Improves the body's ability to use insulin
- ✓Reduces insulin requirement
- ✓Better control of diabetes
- ✓Reduces the risk of heart disease






Initiatives to integrate care

- **Expanded role of all health care providers, nurses and advanced practice nurses**
 - **Expanding role of community leaders**
 - **Networking with agencies**
- 



Grassroots efforts in US

- **Michelle Obama**
 - **Obesity task forces at state levels**
 - **School meals and snacks**
 - **Family meals**
 - **Slowfood.com**
- 

Promotora concept (community health aide)

- **Hispanic/Latino Americans:**
 - 2+ million
 - Mexican Americans over twice as likely to have diabetes



Immersion experiences

- Homeless Connect
- Students in community settings (undergraduate-doctoral levels)

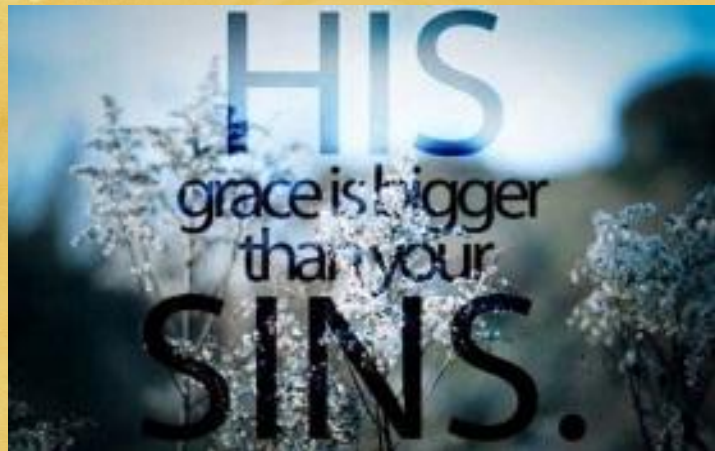


Interprofessional Education



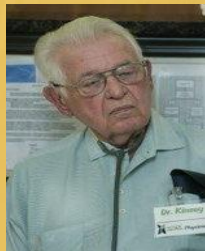


Faith-based clinics



Hope Health Center, Fairhope, Alabama

- Volunteer medical/nursing staff
- Provides prescription drug assistance





Conan O'Brien 

@ConanOBrien



Follow

Obamacare begins tomorrow, and you know what that means! Wait, actually, no, you probably don't know what that means.

Missions within US

- Remote Area Medical (RAM)



Remote Area Medical (RAM)



Remote Area Medical (RAM)



Remote Area Medical (RAM)

- All volunteer staff of doctors, nurses, dentists, optometrists, students



Role Model

Sonya Sotomayer

(Supreme Court Justice)


Grew up in poverty

- **Juvenile diabetes**
- **Father an alcoholic**
- **Mother worked**







Resources

- **American Diabetes Association**
 - **American Association of Diabetes Educators**
 - **Alabama Department of Public Health**
 - **Migrant Clinicians Network**
 - **America's Cheapest Family-The Economides**
 - **learningaboutdiabetes.org**
 - **Local vendors**
 - **Association of Clinicians for the Underserved**
 - **dLifeNews@dLifemail.dLife.com**
 - **DiabetesPro@SmartBrief.com**
- 




References

- **Centers for Disease Control**
 - **Chaufan, C., Davis, M., Constantino, S. (2011). Journal of Community Health. The twin epidemics of poverty and diabetes disparities in a low-income Latino and immigrant neighborhood. Institute for Health and Aging. San Francisco, Ca.,1032-1043.**
 - **Fox News: Type 2 diabetes more common among low-income families. (July, 2013)**
<http://www.foxnews.com/health/2013/07/03/type-2-diabetes>
 - **Hyman, M. (September, 2010). Huffington Post. The link between poverty, obesity, and diabetes.**
http://www.huffingtonpost.com/dr-mark-hyman/not-having-enough-food-ca_b_721344.ht
- 



References

- Neale, T., (January, 2012). MedPage Today. Programs improve diabetes care in low-income areas.
<http://www.medpagetoday.com>
 - Roizen, M. (2010). Straight talk about chronic disease.
<http://myclevelandclinic.org>
 - Shah, N. (October, 2013). U.S. News. US poverty rate stabilizes-for some.
<http://online.wsj.com/news/articles>.
 - United States Census
- 



Questions? Thank you!

